

LIST OF PUBLICATIONS BY JARI KINARET

A. Publications

1. J.M. Kinaret and P.A. Lee: *Exchange Interaction in a Parabolically Confined Wire in a Strong Magnetic Field*, Phys. Rev. B 42, 11738 (1990).
2. J.M. Kinaret and P.A. Lee: *Conductance of a Narrow Disordered Wire in a Strong Magnetic Field*, Phys. Rev. B 43, 3847 (1991).
3. J.M. Kinaret, Y. Meir, N.S. Wingreen, P.A. Lee, and X.-G. Wen: *Conductance through a Quantum Dot in the Fractional Quantum Hall Regime*, Phys. Rev. B 45, 9489 (RC) (1992).
4. P.L. McEuen, E.B. Foxman, J.M. Kinaret, U. Meirav, M.A. Kastner, N.S. Wingreen, and S.J. Wind: *Self-consistent addition spectrum of a Coulomb island in the quantum Hall regime*, Phys. Rev. B 45, 11419 (RC) (1992).
5. J.M. Kinaret, Y. Meir, N.S. Wingreen, P.A. Lee, and X.-G. Wen: *Many-Body Coherence in Conduction through a Quantum Dot in the Fractional Quantum Hall Regime*, Phys. Rev. B 46, 4681 (1992).
6. J.M. Kinaret: *A Quantum Dot in the Fractional Quantum Hall Regime*, Physica B 189, 142 (1993).
7. P.L. McEuen, N.S. Wingreen, E.B. Foxman, J.M. Kinaret, U. Meirav, M.A. Kastner, and Y. Meir: *Coulomb Interactions And Energy-Level Spectrum of a Small Electron Gas*, Physica B 189, 70 (1993).
8. J.M. Kinaret and N.S. Wingreen: *Coulomb Blockade And Partially Transparent Tunneling Barriers in the Quantum Hall Regime*, Phys. Rev. B 48, 11113 (1993).
9. P. Johansson and J.M. Kinaret: *Magnetophonon Shakeup in a Wigner Crystal: Applications to Tunneling Spectroscopy in the Quantum Hall Regime*, Phys. Rev. Lett. 71, 1435 (1993).
10. P. Johansson and J.M. Kinaret: *Tunneling between Two Two-dimensional Electron Systems in a Strong Magnetic Field*, Phys. Rev. B 50, 4671 (1994).
11. A. Kumar, J.M. Kinaret, C.C. Eugster, T.P. Orlando, and D.A. Antoniadis: *Anti-Correlated Coulomb Blockade Oscillations in a Three-Lead Quantum Dot*, Proceedings of the XXIXth Rencontre du Moriond Series: Coulomb and Interference Effects in Small Electronic Systems, eds. D.C. Glatli, M. Sanquer, and J. Trần Thanh Vân (Editions Frontieres, Gif-sur-Yvette, 1994).
12. A. Kumar, C. Eugster, T. Orlando, D. Antoniadis, J. Kinaret, M. Rooks, and M. Mellouch: *Correlation of Oscillations in a Quantum Dot with Three Contacts*, Appl. Phys. Lett. 66, 1379 (1995).
13. P. Johansson and J.M. Kinaret: *Tunneling between Two Two-dimensional Electron Systems in a Strong Magnetic Field*, Physica B 210, 446 (1995).
14. P. Johansson and J.M. Kinaret: *Coulomb Blockade in Two-Dimensional Electron Systems in a Strong Magnetic Field*, Physica B 212, 278 (1995).
15. K. Flensberg, B.Y.-K. Hu, A.-P. Jauho, and J.M. Kinaret: *Linear response theory of Coulomb drag in coupled electron systems*, Phys. Rev. B 52, 14761 (1995).
16. A. Eriksson, J.M. Kinaret, and L. Mikheev: *Fluctuating loops and glassy dynamics of a pinned line in two dimensions*, Phys. Rev. B 54, 2984 (1996).
17. A.-P. Jauho, M. Bønsager, K. Flensberg, B. Y.-K. Hu, and J. Kinaret, *Microscopic theory of Transconductivity*, VLSI Design 6, 87 (1998).
18. J.M. Kinaret: *Statistical Physics*, lecture notes for a graduate course in statistical mechanics (Chalmers, Gothenburg, 1996).
19. J.M. Kinaret, M. Jonson, R.I. Shekhter, and S. Eggert, *Interplay of Coulomb blockade and Aharonov-Bohm resonances in a Luttinger Liquid*, Phys. Rev. B 57, 3777 (1998).
20. S. Eggert, A. Mattsson, and J.M. Kinaret: *Correlation functions of interacting electrons at finite temperature and size*, Phys. Rev. B 56, 15537 (1997).
21. J.M. Kinaret, M. Jonson, R.I. Shekhter, and S. Eggert: *Interference and interactions in mesoscopic rings*, Physica E 1, 265 (1997).
22. O.G. Heinonen, J.M. Kinaret, and M.D. Johnson: *Ensemble density functional approach to charge-spin textures in inhomogeneous quantum Hall systems*, Phys. Rev. B 59, 8073 (1999).
23. J. Kinaret, M. Jonson, A. Barany, P. Sylwan, and S. Bjorn-Rasmussen (editors): *Elektronernas nya dans (The New Dance of the Electrons)*, The Royal Swedish Academy of Sciences poster presentation of the Nobel prize in physics in 1998 (1998).
24. Mats Jonson and Jari Kinaret: *Nobelpriset i fysik 1998*, Kosmos (1999).
25. K. Engstrom and J.M. Kinaret: *Vortices in a finite array of Josephson junctions*, Low Temperature Physics 28, 3 (2002).

26. K. Engström, J.M. Kinaret, M. Puska, and H. Saarikoski: *Influence of electron-electron interactions on supercurrent in SNS structures*, Low Temperature Physics 29, 546 (2003).
27. J. Kinaret, T. Nord, and S. Viefers: *A Carbon Nanotube Based Nanorelay*, Appl. Phys. Lett. 82, 1287 (2003).
28. K. Engström, J.M. Kinaret, M. Puska, and H. Saarikoski: *Interaction effects in superconductor-quantum dot-superconductor structures*, Comp. Mat. Sci. 30, 21 (2004).
29. J. Kim, I.V. Krive, and J.M. Kinaret: *Non-equilibrium plasmons in a quantum wire single electron transistor*, Phys.-Rev.-Lett. 90, 176401 (2003).
30. M. Jonsson, T. Nord, S. Viefers, and J.M. Kinaret: *Effects of short range forces on the nanorelay*, Proceedings of the Symposium on Fullerenes, Nanotubes, and Carbon Nanoclusters, the 203rd meeting of the Electrochemical Society (2003).
31. L.M. Jonsson, T. Nord, S. Viefers, and J.M. Kinaret: *Effects of surface forces and phonon dissipation in a three-terminal nanorelay*, J. Appl. Phys. 96, 629 (2004).
32. K. Engström and J.M. Kinaret: *Phase-dependent charges in S-N-S systems*, Physica Scripta 70, 326 (2004).
33. L.M. Jonsson, S. Axelsson, T. Nord, S. Viefers, and J.M. Kinaret: *High-frequency response of the nanorelay*, Nanotechnology 15, 1497 (2004).
34. J.U. Kim, J.M. Kinaret, and M.-S. Choi: *Shot noise enhancement from non-equilibrium plasmons in Luttinger-liquid junctions*, J. Phys.: Cond. Mat., 17, 3815 (2005).
35. J. Kim, I.V. Krive, J.M. Kinaret, and M.-S. Choi: *Nonequilibrium plasmons and transport properties of a double-junction quantum wire*, submitted to Phys. Rev. B (2005); see cond-mat/0503398.
36. S. Axelsson, E.E.B. Campbell, L.M. Jonsson, J. Kinaret, S.W. Lee, Y.W. Park, and M. Sveningsson: *Theoretical and experimental investigations of three-terminal carbon nanotube relays*, submitted to New Journal of Physics (2005).

B. Patents

1. J. M. Kinaret, T. Nord, and S. Viefers, international patent application PCT/SE02/00853: *A Mechanical Relay Device*.
2. M.L. Jonsson, S. Axelsson, T. Nord, S. Viefers, and J.M. Kinaret, patent application *Nanoelectromechanical components*, submitted to the US Patent Office on May 14, 2004 with serial number 60/570.882.

C. Invited talks

1. *Carbon Nanotubes: Dreams, Challenges, and Nightmares*, annual meeting of the Finnish Physical Society, Espoo, Finland; March 2000.
2. *Shrinking worlds: flatter, thinner, shorter*, annual meeting of the National Graduate School on Materials Physics, Jyväskylä, Finland; January 2001.
3. *A carbon-nanotube-based nanorelay*, international conference on Fundamental Problems in Nanoelectromechanical Systems, Gothenburg, Sweden; June 2004.
4. *Carbon-based nanoelectromechanical devices*, inaugural meeting of a European working group on NEMS, Madrid, Spain; January 2005.
5. *Carbon-nanotube-based nanoelectromechanics*, QNano workshop, Kyoto, Japan; April 2005.
6. *Beyond CMOS: Case for Carbon-based NEMS*, Sixth International Workshop on Future Information Processing Technologies, Asheville, North Carolina, August 2005.